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ABSTRACT

The paper discusses issues in the education of learning disabled (LD) secondary students. Among problems noted are the lack of fit between characteristics of the disabled learner and characteristics of secondary education and the exacerbating effects of learning disabilities on adolescent concerns. Successful strategies identified in the research are described, including helping LD adolescents move from external to internal motivation and helping them to learn strategies that emphasize how rather than what to learn. A final section reviews research on the teachers' role and teachers' need for preparation and support. A list of resources, organizations, and references concludes the paper. (CL)

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Issues in Middle-Grade Education

THE LEARNING-DISABLED STUDENT

Research & Resources

While confusion and rapid change have marked research and practices among all learning-disabled (LD) youngsters, special educators who study and work with those of elementary school age can at least look back upon more than one decade of accomplishment. Only recently, however, has attention turned to the needs of older LD students, as the realization dawned that not all learning disabilities could be detected, remediated, or compensated at the elementary level (Goodman & Mann, 1976).

The optimism of the 1960s, when practitioners believed that the needs of learning-disabled youngsters could be fully met in elementary schools, faded as the "first generation of identified children who received public assistance on a scale of any consequence [entered] adolescence" (Kronick, 1975, p. 20). Thus, in the mid-1970s, as educators began to write about older children, their subject matter dealt with "few hard facts and fewer answers" (p. 20). Educational services for LD adolescents barely existed. In fact, a national survey in 1975 revealed that, of 37 states reporting, 40% of local school districts served elementary-aged LD youngsters, but only 9% had secondary programs (Scranton & Downs, 1975). It is no wonder, then, that the provisions of Public Law 94-142, guaranteeing a free, appropriate public education to all handicapped children in the most normal and least restrictive environment, caught many school systems and educators ill-prepared to meet the needs of LD students at the secondary level—in middle schools, junior high schools, and high schools.

Trying to meet the needs of adolescent LD students is not a simple matter of transferring knowledge and techniques that work well at lower grade levels. Some LD children, particularly those with difficulties in visual-perceptual functions, are "most likely to improve before and during adolescence" (Lochman & Ralph, 1980, p. 14). Others may actually have more difficulty as they advance through the educational system and are required to have greater verbal fluency, to abstract, compare, or synthesize, or to retrieve and articulate more complex information than was demanded in elementary school. As Goodman and Mann (1976) pointed out, the adolescent LD group may include some students whose "problems. . . were not sufficiently acute to draw attention in early grades," those who "muddled through elementary school but cannot now cope with the more complex demands of secondary education" (p. 6).

The potential complexity of academic courses is but one of the problems that LD adolescents encounter as they advance to the secondary level. Perhaps even more significant is the lack of fit between the characteristics of the disabled learner and the characteristics of secondary education.

Typical Secondary School a Problem for LD Student

"Coinciding with the crises of puberty, children are moved from the cocoon-like. . .world of the elementary school to the turbulent, confusing, subject-oriented, fragmented world of the junior high school," which offers more choices, more freedom, and more responsibility (Jacks & Keller, 1978, pp. 59–60). Even students who are unimpeded by learning disabilities might have difficulty in the fragmented environment of many American middle schools and junior highs. The LD student, to an even greater extent, is the "victim of his own disorder. Parents and teachers. . . must take over the organization of most aspects of his life for a much longer time than is needed for ordinary children. Dependency accompanies immaturity" (Smith, 1978, pp. 2–3).

Several characteristics inhospitable to LD students differentiate secondary schools from elementary schools. In the lower grades, children have the security of one classroom, one teacher, one dependable set of demands. Unlike that concretely structured haven, many secondary schools offer the LD student "five, six, or seven teachers who teach 150 to 160 students a day." Because they are likely to have been trained to teach a specific subject, rather than to understand the developmental needs of an age group, secondary teachers are "many times unaware of the special needs of the LD student. They may find it extremely difficult to individualize instruction when there are so many students to see" (Chaiken & Harper, 1979, p. 7).

In contrast, K–8 and middle schools may be more comfortable environments for LD students, because their organization is less fragmented and more closely linked to the elementary level. To the extent that such schools employ teachers with elementary- or middle-grade certification, their faculties have been trained to understand developmental differences. Further, many degree programs in middle-grade education require special-education courses.

Researchers studying junior and senior high school teachers have found that secondary teachers lecture "significantly more often than they [involve] students in discussion through questioning," thus placing "strong demands on

students' auditory storage and retrieval systems," which are already weak in LD students (Moran, 1980, p. 43). Further, "teachers present few advance organizers," such as preliminary goal statements or summaries of what the class will accomplish, to "help students listen more efficiently" (p. 43). Moran found that there is little checking by junior high teachers to determine if students have understood instructions, and little reinforcement of appropriate performance or correction of inappropriate performance. Pointing out that it is "common practice in special education to use continuous reinforcement . . . to establish new behaviors," Moran said, "The very limited reinforcement schedules of . . . secondary classrooms provide a strong contrast for learning disabled students who have spent time in special classrooms prior to junior high" (p. 45). Deshler (1978) summed up the problems of LD students as they make the transition to secondary schools:

> **Academic success in secondary school is largely a function of one's study and test-taking skills. Learning-disabled youngsters in secondary situations are often deficient on both accounts. Study skills that may be absent include planning a study schedule, reviewing frequently, understanding that there is a difference between being familiar with . . . and knowing material, and knowing which persons to ask for help and how to ask. Test-taking skills that may be absent are these: determining the type of questions a teacher may ask, answering easy questions first, allotting time properly during the test session, answering all questions, and checking answers. (pp. 57–58)**

Learning Disabilities Can Exacerbate Adolescent Concerns

Secondary schools have been designed to recognize the capacity for greater independence that is characteristic of most young adolescents. Similarly, such schools acknowledge both the growing social abilities of teenagers, enabling them to interact with a wider variety of fellow students and teachers, and the emergence of abstract reasoning skills. To understand the scholastic problems of LD adolescents, it is helpful to scan the following checklist of problems that the older learning-disabled student may present: 1) discrepancy between written and oral response; 2) discrepancy in performance among academic areas; 3) difficulty in following directions; 4) trouble in completing assignments; 5) reading level substantially below grade placement; 6) difficulty in attending to tasks; 7) disorganization; 8) poor handwriting; 9) problems in reasoning abstractly; 10) poor social skills; 11) poor arithmetic skills; and 12) poor spelling (Chaiken & Harper, 1979, pp. 6–7).

While they may seem dramatic, these problems are more benign in the classroom than are the characteristics presented by the elementary-aged LD child, who may be hyperactive, emotionally unstable, impulsive, and uncoordinated. But LD adolescent students do not exist in a scholastic vacuum; rather, they live in a world that expects mature behavior to match a mature physical appearance. Thus, although adolescents' learning disabilities may be more susceptible to management under appropriate conditions, such students bring with them to secondary schools the accumulated baggage of prior years of academic and social difficulty. In fact, researchers have pointed out that attempts at scholastic remediation may be lost upon adolescent LD students, who are in even greater need of social, behavioral, and personal/emotional adjustment (Lerner, Evans, & Meyers, 1977; Pihl & McLarnon, 1984).

Some of the social and behavioral characteristics of LD adolescents are merely typical conditions of all adolescents, magnified by the learning disability. "Adolescence does not miraculously bypass the child with a learning disability. Indeed, the adolescent with a learning disability often does not have the coping mechanisms to master the tasks of childhood, let alone those of adolescence" (Jacks & Keller, 1978, p. 59). For example, a temporary drop in self-esteem is not at all unusual in adolescence; but for the LD adolescent, who "learned during his most formative and impressionable years that he couldn't do things, couldn't understand, couldn't perform like other children," the "cumulative effect of repeated failure firmly established his poor image of himself" (Smith, 1978, p. 94). Similarly, many teenagers are prone to disorder and messiness but the LD student "has them more pronouncedly, in more areas, and they last longer." In school such habits manifest themselves in "poor planning, a lack of punctuality, poor study habits, poor follow-through, and unproductive uses of . . . time" (p. 95).

Most young adolescents, as they cope with rapid physical, socio-emotional, and cognitive changes, take comfort in mirroring peers' tastes and interests. But as Jacks and Keller have pointed out, "in a world of teenage conformity, [the LD] adolescent is a non-conformist by circumstance, rather than by choice. At an age when a case of acne can spell gloom and depression, this adolescent suffers from the anxiety that . . . peers might uncover this 'hidden handicap'" (p. 61).

The perceptual skills that affect LD students' school performance can handicap social development at a time in life when friends and social groups are particularly important. Axelrod (1982) reported that LD adolescents "appear to be significantly lower in nonverbal social perception skill" than other adolescents (p. 611). As a result, the LD young person may tend to be egocentric; the lack of perceptual skills that slows learning can also delay the development of sensitivity to the needs of others. In addition, as LD adolescents begin to evaluate their inadequacies in comparison to non-LD youngsters, they may engage in scapegoating others with similar or different problems (Smith, 1978, p. 92).

Struggling to achieve control over feelings of helplessness, some LD adolescents become ritualistic (Smith, p. 92). They may also become excessively fatigued, possibly a positive sign that the LD adolescent is making a conscious effort

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to "stop, think, figure out what comes first, next, last, and then go back to make sure he did it" (p. 96).

Recent research among LD adolescents and their non-LD peers has shown some optimistic signs for those who have learning problems. Silverman and Zigmond (1983) found that LD adolescents do not necessarily see themselves as incompetent (p. 480). While others might dispute this claim, it is an interesting finding that will await further examination. Whalen, Henker, Dotemoto, and Hinshaw (1983) studied non-LD students' perceptions of hypothetical, atypical peers at four different grade levels (4, 6, 8, and 10) and found that as students mature, they become more accepting of differences.

Researchers Point to Successful Strategies

The body of research and commentary on adolescent learning disabilities is shrouded in a confusing variety of opinions and tentative findings. For the practitioner who is charged with appropriately meeting the learning needs of LD students, there are no all-purpose solutions. Nevertheless, it is encouraging that the subject of appropriate education in secondary schools has been undertaken in recent years, and that some successful strategies have been tested.

Marsh, Gearheart, and Gearheart (1978), in a volume devoted to an examination of existing secondary program alternatives, clearly distinguished between attempts to remediate adolescent students and attempts to accommodate them. According to the authors, remedial teaching focuses on "changing the *learner*. . .so that he or she may more effectively relate to the educational program as it is provided and administered for all students." Accommodation, on the other hand, focuses on "changing the *learning environment* or the *academic requirements* so that the student may learn in spite of a fundamental weakness or deficiency" (p. 85).

Remediation is a more viable alternative in elementary programs, before students' central nervous systems are mature. But efforts to remediate may reach a plateau at about the tenth grade level. Thus, "accommodation. . .exceed[s] in importance in the secondary school . . .The emphasis *must* become focused on the use of whatever skills and abilities the student may have" (p. vi). In other words, schools should accommodate LD students' use of aids like calculators in math classes, tape-recorded texts in literature classes, or oral rather than written examinations.

Two relatively recent investigations of teaching and learning strategies for LD adolescents seem particularly promising. The University of Kansas Institute for Research on Learning Disabilities has studied LD adolescents for the past few years, developing an intervention model based on the common characteristics of the disabled adolescent learners that Institute staff members and others have studied.

The goal of the Kansas model is to help LD adolescents function more independently in academic settings by teaching them learning strategies that emphasize *how* to learn rather than *what* actual content is learned (Schumaker, Deshler, Alley, & Warner, 1983, p. 56). Using the learning-strategy approach only, the Kansas group found that LD students made significant gains in a resource room but not in other classroom settings. They consequently added and continued to experiment with a variety of other curricula, including social skills, generalization and maintenance, motivation or goal setting, and evaluation. By meeting LD adolescents' learning delays and deficiencies on a variety of social, educational, and behavioral levels, the researchers found that the "performance of LD adolescents in secondary schools can be favorably affected" (p. 50). Writing about the early implications of their research, members of the Kansas group commented, "LD students, within this model, are seen as capable of becoming, and are taught to be, responsible individuals who have a right to have decision-making authority in their personal educational programs" (p. 66).

At the University of Houston, Meisgeier has developed another promising model for teaching LD adolescents. Called Synergistic Education, the model consists of four components. The academics component is carried out in a resource room where rapid increases in reading fluency are emphasized. The social-behavioral segment of the program consists of a one-semester psychology course because "data now available suggest that efforts. . .should focus as much on what is occurring inside the student as on what is happening in the classroom" (Meisgeier, 1981, p. 2). The parent education component is an accompaniment to the social-behavioral segment of the model. Finally, the content mastery segment is designed to give students support in regular classrooms, rather than in a resource room.

Both Meisgeier and the Kansas team have addressed the need to move LD adolescents from external to internal motivation. Meisgeier (1984) reported that the Houston model showed "movement. . .in a positive direction from external to internal control." Members of the Kansas group tested a system in which points (external motivators) were exchanged for privileges, then gradually withdrawn. They found that daily exchange of points could be extended to weekly, bi-monthly, and then "eliminated entirely without a decrease in grades for some [junior high LD] students" (Deshler, Schumaker, & Lenz, 1984, pp. 109–110). Other students, however, continued to need weekly feedback and an exchange of privileges.

In recent years, various forms of treatment and intervention for LD adolescents have gained and lost in popularity. At present, the microcomputer seems to hold promise but needs further study. Some software and information resources are now available (Gaushell, 1983). Another technique to help LD students achieve greater ability to concentrate on learning—drug therapy—has become far less popular. "Treatment with stimulant drugs. . .has probably no long-term beneficial effect. . . .In the adolescent, the negative consequences of 'treating a problem with a pill' should be considered very carefully: the responsibility for behavior is shifted from the adolescent to a drug" (Cannon & Compton, 1980, p. 91).

Teachers Need Preparation and Support

No discussion of adolescent learning disabilities would be complete without a review of the issues that affect who teaches LD students, and where they should be taught. In elementary schools, resource rooms staffed by trained special educators have proven their worth in serving LD students. On the secondary level, however, the case for resource rooms is not quite so clear-cut. Although resource rooms figure pro-

minently in both the Kansas and Houston intervention models, both programs work to move the LD adolescent from the resource room into the regular classroom, recognizing that the resource teacher cannot specialize in every subject that the LD student must study. If they are to be helpful and "least restrictive," resource teachers and resource rooms should serve as a support, rather than as the primary focus of the LD student's secondary education.

A study in which LD students were observed in regular classrooms revealed that "teachers were equitable in their interactions with learning-disabled and non-learning-disabled students." Nevertheless, LD students "perceived less approval and more disapproval from their teachers and were happy in their regular classrooms significantly less often than non-learning-disabled students" (Skrtic, 1980, p. vii). Yet according to Madden and Slavin (1983), LD students seem to achieve more readily in regular classrooms, with individualized instruction, than they do in special-education classrooms (p. 529). The socio-emotional growth of LD students who are mildly handicapped tends to be better in regular classes, too, *if* support such as individualized instruction or "well-designed resource programs" are available. However, this does not mean that special education "can be abandoned or that. . .children should simply be moved back into regular classrooms and forgotten" (p. 536).

The challenge, then, seems to be to mainstream students in hospitable classrooms, with well-trained teachers aided by resource facilities to support classroom learning. LaMore (1984) has warned that four conditions are key to successful mainstreaming: 1) the classroom teacher must be notified about the LD student and the specific disability; 2) the classroom teacher must be prepared and trained to take on the student; 3) the class must be prepared to take on the student, through explanation of the disability, simulation of the handicap, and demonstration of ways in which classmates can be helpful; and 4) there must be regular follow-up by special education staff (p. 33). Without adequate staff development, university-level teacher training, and preparation of special educators, these are difficult criteria to meet.

While most researchers acknowledge that classroom teachers need preparation for mainstreaming, the training of special educators to work with adolescent students is also a major concern. Unfortunately, many states have not differentiated between the certification of elementary, middle-grade, and secondary specialists, and "differences in the orientation of teachers and the focus of curricula. . .have been minimal" (Marsh et al., 1978, p. 13). Lerner et al. (1977) pointed out that the "specialist is often unfamiliar with adolescent psychology. . .or appropriate materials for teaching the adolescent" (p. 8).

Regular classroom teachers cannot work effectively with resource room teachers without the support and encouragement of school principals. Because their schools are the first setting in which LD students encounter a mix of teacher styles and classrooms, middle school and junior high principals have a special obligation to provide opportunities for special educators to work with regular classroom teachers. Langone (1983) described a system in which the principal encourages teachers to note student learning styles, assists in acquiring volunteers to prepare compensatory teaching aids, rearranges teaching schedules to allow teachers and special educators to meet within and outside the classroom, and assists in modifying ways to measure student progress.

Since LD adolescents, like their non-LD counterparts, are a highly varied group, it is impossible to give one simple answer to the question, "Where should these students be taught?" Disabilities differ in severity and susceptibility to treatment. Thus, while mainstreaming is a popular option at the present time, it is not necessarily the best solution for all LD students, especially those with severe learning problems (Goodman, 1978). Weiderholt (1978) described six types of programs that are needed for LD adolescents: 1) noneducational medical and welfare services, 2) residential schools, 3) full-time special classes, 4) part-time special classes, 5) resource programs, and 6) consultation to teachers of handicapped students in regular educational programs (p. 20).

The state of American education for LD adolescents is at once promising and in a state of confusion, requiring more research, more teacher training, and more options for students. Commentators have decried the fact that "there is no plan for good programs in every secondary school in North America" (Kronick, 1975, p. 20), or that there are too many "instant specialists" and "too little preparation of qualified teachers" (Cruickshank, 1977, p. 64). Perhaps Weiderholt summed up the situation best when he stated, "Some information is known, other information is tentative and experimental, and much remains to be discovered" (p. 25).

Resources

In addition to the titles cited in the reference section, the following books and articles offer practical help for professionals and volunteers who work with learning-disabled adolescents:

Classroom Management and the Exceptional Learner, by Frank M. Hewett and Philip C. Watson. In **Classroom Management**, edited by Daniel L. Duke. (1979)

The Learning Disabled Adolescent: Learning Success in the Content Areas, by Dolores M. Woodward and Delores J. Peters. (1983)

Mainstreaming the Learning Disabled Adolescent: A Manual of Strategies and Materials, by Dolores M. Woodward. (1981)

No Easy Answers: The Learning Disabled Child, by Sally L. Smith. (1978)

Social Skills Curricula for Mildly Handicapped Adolescents: A Review, by Jean Bragg Schumaker et al. In **Focus on Exceptional Children, 1983, 16(4), 1-16.**

Teaching the Learning-Disabled Adolescent, edited by Lester Mann, Libby Goodman, and J. Lee Wiederholt. (1978)

Teaching the Learning Disabled Adolescent: Strategies and Methods, by Gordon Alley and Donald Deshler. (1979)

Organizations

The **Association for Children and Adults With Learning Disabilities** is a national organization devoted to defining and finding solutions for children and adults with learning

disabilities. The Association has affiliates in all 50 states, with more than 800 local chapters. Services of the national office include information and referral, school program development, a legislative committee, and conferences. Publications include: **Helping the Adolescent With the Hidden Handicap**, **Adolescence & LD (A Time Between)**, **What About Me? The LD Adolescent**, and **The Adolescent With Scholastic Failure**. *Address: 4156 Library Rd., Pittsburgh, PA 15234.*

The **Council for Exceptional Children** is a professional organization with over 50,000 members that houses the ERIC Clearinghouse on Handicapped and Gifted Children and coordinates and supports a network of local chapters, state federations, student organizations, and special interest divisions. CEC staff provide information to teachers, administrators, and parents concerned with the education of exceptional children. (Publications list available.) *Address: 1920 Association Dr., Reston, VA 22091.*

The **Institute for Research in Learning Disabilities** has specified the learning-disabled adolescent and young adult as the target population of its research efforts. The Institute's major responsibility is to develop effective means of identifying LD populations at the secondary level and to construct interventions that will have an effect upon school performance and life adjustment. An overview of the Institute's work can be found in the May 1983 and September 1982 issues of **Focus on Exceptional Children**. *Address: 313 Carruth-O'Leary Hall, University of Kansas, Lawrence, KS 66045.*

The **National Coalition of Advocates for Students** is a network of child advocacy organizations that work on school issues at the federal, state, and local levels. NCAS seeks to improve the quality of public education for all students, with particular attention paid to the poor, minority, and handicapped. *Address: Room 350, 76 Summer St., Boston, MA 02110.*

The **National Easter Seal Society** is a nonprofit health care agency that provides direct services to people with disabilities, conducts educational programs, advocates for equal rights for people with disabilities, and awards grants to finance research. (Publications list available.) *Address: 2023 West Ogden Ave., Chicago, IL 60612.*

The **Orton Dyslexia Society** is an international organization concerned with specific language difficulty or developmental dyslexia. The Society aims to improve understanding, promote research, share information, and encourage appropriate teaching. An information packet is available that includes brochures and a publications list. (Send $1 to cover postage and handling.) *Address: 724 York Rd., Baltimore, MD 21204.*

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